Modified from Till, A. B., Dumoulin, J.A., Phillips, J.D., Stanley, R.G., and Crews, J., 2006, Generalized bedrock geologic map, Yukon Flats region, east-central Alaska: U.S. Geological Survey Open-File Report 2006-1304, 1 sheet, scale 1:500,000. http://pubs.usgs.gov/of/2006/1304/

Small map segment shown in southeast corner was modified from Wilson, F.H., Hults, C.P., Mull, C.G., and Karl, S.M., Geologic map of Alaska: U.S. Geological Survey Scientific Investigations Map 3340, 2 sheets, scale 1:584,000. doi: 10.3133/sim3340

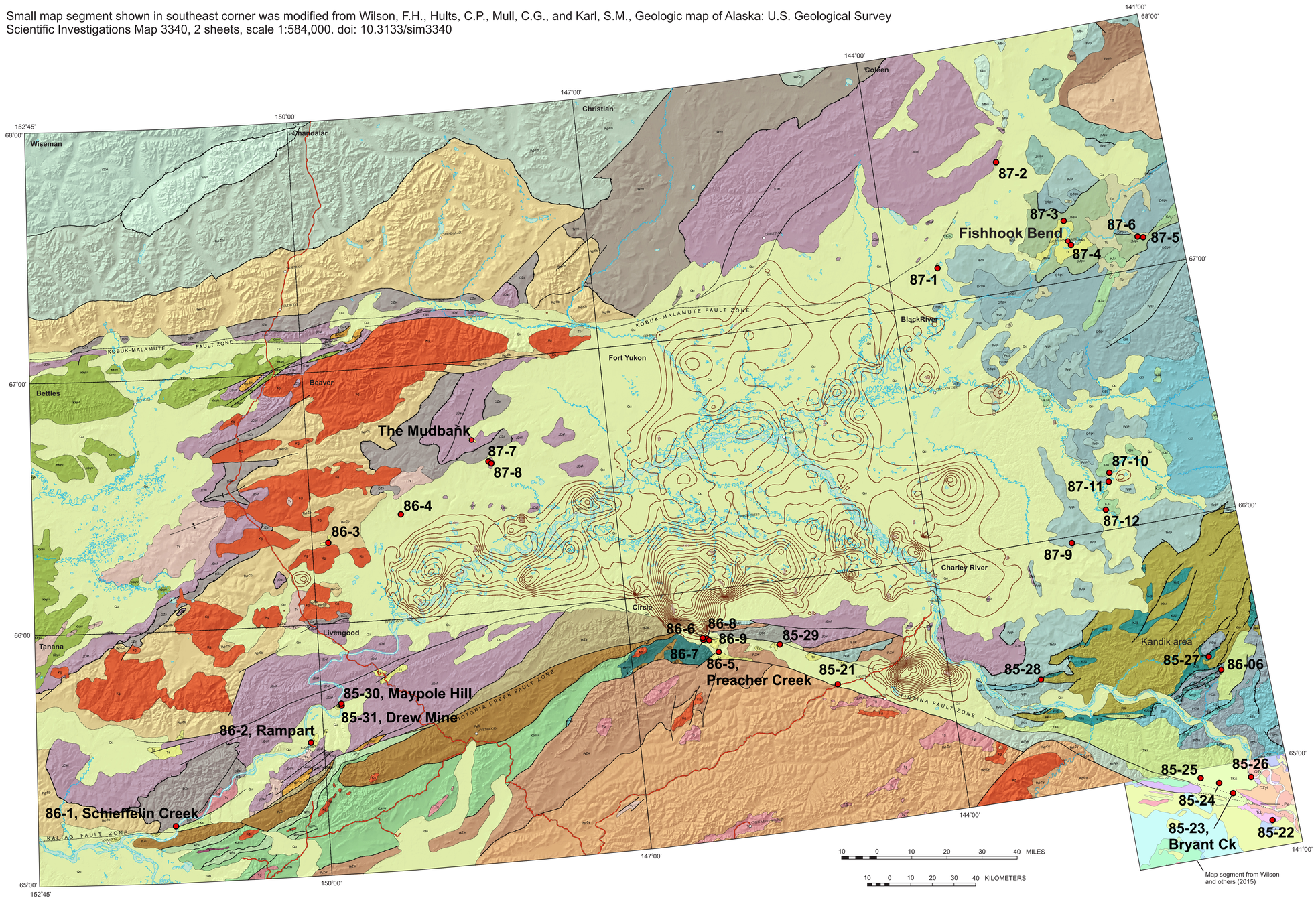

Figure 1.

LIST OF MAP UNITS

MAP UNITS FROM TILL AND OTHERS (2006)

UNITS PRESENT IN MORE THAN ONE PROVINCE

- Qu — Unconsolidated and poorly consolidated sediments (Quaternary)
- Tb — Basalt flows and rare cinder cones (Tertiary)
- Tg — Granitic rocks (Tertiary)
- Ts — Clastic sedimentary rocks (Tertiary)
- TKs — Sedimentary rocks (Tertiary and Cretaceous)
- Kg — Granitic rocks (Cretaceous)
- TPgt — Glenn Shale, lower part, Tahkandit Limestone, undivided Triassic and Permian)
- JDat — Angayucham-Tozitna terrane, undivided (Early Jurassic to Devonian)

BROOKS RANGE PROVINCE

- Tv — Volcanic rocks
- Kkyu — Sedimentary rocks of the Yukon-Koyukuk basin, undivided (Cretaceous)
- KDe — Sedimentary rocks of the Endicott Mountains allochthon (Cretaceous to Devonian)
- TPzd — Metasedimentary, metavolcanic, and sedimentary rocks of the Doonerak Window (Triassic to lower Paleozoic)
- Mbu — Brooks Range sequence, undivided (Mississippian)
- Pzvu — Sedimentary rocks of the Venetie terrane, undivided (Paleozoic)
- DZs — Metamorphosed sedimentary rocks (Devonian to Proterozoic)
- PzpCm — Metamorphic rocks (Paleozoic? and (or) Precambrian?)
- PzpCb — Metasedimentary and metaigneous rocks of the southern Brooks Range and Ruby geanticline (Paleozoic and (or) Precambrian)
- PzpCh — Metasedimentary and metaigneous rocks of the Hammon terrane (Paleozoic and (or) Precambrian)

PORCUPINE PROVINCE

- Kku — Sedimentary rocks of the Kandik basin, undivided (Cretaceous)
- KJg — Glenn Shale, upper part (Early Cretaceous and Jurassic?)
- KJu — Sedimentary rocks, undifferentiated (Cretaceous? and Jurassic?)
- JMsu — Strangle Women Creek sequence, undivided (Jurassic to Mississippian)
- Cg — Granite and quartz monzonite (Carboniferous)
- Pzcm — Metamorphic rocks (Paleozoic?)
- Pzqs — Sedimentary and igneous rocks (Paleozoic?)
- JMpu — Younger strata of the Porcupine River sequence, undivided (Jurassic to Mississippian)
- DCpu — Older strata of the Porcupine River sequence, undivided (Devonian to Cambrian)
- PCta — Sedimentary rocks of the Tatonduk area (Permian to Cambrian)
- Cpt — Sedimentary rocks of the Tindir Group (Cambrian? and Proterozoic)

YUKON-TANANA PROVINCE

- KJmu — Sedimentary rocks of the Manley basin, undivided (Lower Cretaceous and Jurassic)
- MzmV — Fine-grained sedimentary rocks and tuff (Mesozoic)
- TrPs — Sedimentary rocks (Triassic(?) to Early Permian)
- MzPzq — Low-grade metamorphic rocks (Mesozoic? and (or) Paleozoic?)
- DSc — Metamorphosed sedimentary rocks (Devonian and Silurian)
- PzUm — Ultramafic rocks (Paleozoic?)
- PzZs — Sedimentary and igneous rocks corresponding to the older parts of the Schwatka-Rampart area sequence (Paleozoic to Proterozoic)
- PzZl — Sedimentary and igneous rocks corresponding to the Livengood area sequence (Paleozoic to Proterozoic)
- PzZw — Sedimentary and igneous rocks corresponding to the older parts of the Fairbanks-White Mountains area (Paleozoic to Proterozoic)
- PzpCy — Metamorphic rocks of the Yukon-Tanana Upland, undivided (Paleozoic to Precambrian?)

SELECTED MAP UNITS FROM WILSON AND OTHERS (2015)

- QTs — Poorly consolidated surficial deposits (Quaternary, Pleistocene, and uppermost Tertiary)
- TKs — Conglomerate, sandstone, and lignite (lower Tertiary to upper Cretaceous)
- Tcb — Coal-bearing sedimentary rocks (Tertiary, Pliocene to Eocene?)
- JZu — Mafic and ultramafic rocks in central, western, and northern Alaska (Jurassic to late Proterozoic)
- DZyf — Clastic and carbonate rock of Yukon Flats basin (Devonian to Neoproterozoic)
- Pv — Basalt and red beds member (Tindir Group) and Mount Copleston volcanic rocks (Proterozoic)

Contact; depositional, intrusive, or metamorphic

Fault; dashed where thought to be present in the subsurface

Thrust fault; teeth on structurally higher side

Antiform — Synform; axis plunging west

Contours in meters representing depth to basement, interpreted inverted gravity model (Phillips, unpub. data)

Road

Town or settlement — 85-25 Core hole and core hole number